#### REMARKS

This is a full and timely response to the non-final Office Action mailed October 11, 2006. Upon entry of the foregoing amendments, claims 1-22 are pending in the application. Claims 11, 14 and 18 have been amended. Claim 23 has been canceled. The subject matter of amended claims 11, 14 and 18 can be found in the originally filed specification in at least FIGs. 2, 3, 4A, 4B, 5A and 5B and the related detailed description. Consequently, no new matter is added to the present application. In light of the foregoing amendments and following remarks, Applicants request reconsideration of the application and pending claims.

# I. Allowable Subject Matter

Applicants thank the Examiner for indicating in the Office Action that claims 1-10 are allowed and that claim 23 would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Applicants have hereby amended claim 18 to include the subject matter of canceled claim 23. Accordingly, Applicants have placed claims 18-22 in condition for allowance.

Applicants have hereby amended claim 11 to include "the second region of electrical connection pads arranged to have a higher areal density than electrical connection pads in the first region of electrical connection pads," which the Examiner has indicated is not found in or suggested by the prior art. Accordingly, Applicants have placed claims 11-17 in condition for allowance and respectfully request a Notice of Allowance of pending claims 1-22.

# II. Claim Rejections Under 35 USC § 103– Claims 11, 12, 14, 16-19 and 21

# A. Statement of the Rejections

Claims 11, 12, 14, 16-19 and 21 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over of U.S. Patent 6,137,168 to Kirkman, hereafter *Kirkman* in view of U.S. Patent Application Publication 2002/0046880 to Takubo *et al.*, hereafter *Takubo*.

APPLICATION NO.: 10/669,982 ATTORNEY DOCKET NO.: 10021114-1

Page 8 of 12

### **B.** Discussion of the Rejections

In order for a claim to be properly rejected under 35 U.S.C. § 103, the combined teachings of the prior art references must suggest all features of the claimed invention to one of ordinary skill in the art. See, *e.g.*, *In Re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981). *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (Citations omitted). Further, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780 (Fed Cir. 1992).

Thus, to establish a *prima facie* case of obviousness, the prior art (or references when combined) must teach or suggest all claim features. Applicants' independent claims 11 and 18, as amended, comprise a combination (of elements and features) that is not disclosed, taught, or suggested by the prior art.

#### 1. Claims 11, 12, 14, 16 and 17

Applicants' independent claim 11, as amended, includes "the second region of electrical connection pads arranged to have a higher areal density than electrical connection pads in the first region of electrical connection pads." The proposed combination (namely, *Kirkman* in view of *Takubo* as applied to claim 11) fails to disclose, teach or suggest at least this feature of claim 11.

Thus, the proposed combination fails to establish a *prima facie* case of obviousness regarding Applicants' independent claim 11. Accordingly, Applicants respectfully request that the rejection of claim 11 under 35 U.S.C. § 103(a) be withdrawn.

Further, Applicants respectfully submit that dependent claims 12, 14, 16 and 17, which depend from allowable independent claim 11 are allowable for at least the reason that they depend from an allowable independent claim. *In re Fine, supra*. Accordingly, Applicants respectfully request that the rejection of claims 12-17 under 35 U.S.C. § 103(a) also be withdrawn.

2. Claims 18, 19 and 21

Applicants' independent claim 18, as amended, includes "said plurality of bond pads are disposed with an areal density less than said connection pads." The proposed combination (namely, *Kirkman* in view of *Takubo*) fails to disclose, teach or

suggest at least this feature of claim 18.

Thus, the proposed combination fails to establish a *prima facie* case of obviousness regarding Applicants' independent claim 18. Accordingly, Applicants respectfully request that the rejection of claim 18 under 35 U.S.C. § 103(a) be

withdrawn.

Further, Applicants respectfully submit that dependent claims 19 and 21, which depend from allowable independent claim 18, are allowable for at least the reason that they depend from an allowable independent claim. *In re Fine, supra*. Accordingly, Applicants respectfully request that the rejection of claims 19 and 21 under 35 U.S.C. § 103(a) also be withdrawn.

III. Claim Rejections Under 35 USC § 103– Claims 13 and 22

A. Statement of the Rejections

Claims 13 and 22 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Kirkman* in view of *Takubo* as applied to claim 12 and 21 and further in view of U.S. Patent Application Publication 2002/0139566 to Strandberg,

hereafter Strandberg.

**B.** Discussion of the Rejections

Applicants' independent claims 11 and 18, as amended, comprise a combination (of elements and features) that is not disclosed, taught, or suggested by

the proposed combination.

1. Claim 13

Applicants' independent claim 11, as amended, includes "the second region of electrical connection pads arranged to have a higher areal density than electrical connection pads in the first region of electrical connection pads." The proposed

combination (namely, *Kirkman* in view of *Takubo* as applied to claim 11 in further view of *Strandberg*) fails to disclose, teach or suggest at least this feature of claim 11.

Thus, the proposed combination fails to establish a *prima facie* case of obviousness regarding Applicants' dependent claim 13, which includes all the features of independent claim 11. Accordingly, Applicants respectfully request that the rejection of claim 13 under 35 U.S.C. § 103(a) be withdrawn.

#### 2. Claim 22

Applicants' independent claim 18, as amended, includes "said plurality of bond pads are disposed with an areal density less than said connection pads." The proposed combination (namely, *Kirkman* in view of *Takubo* as applied to claim 18 in further view of *Strandberg*) fails to disclose, teach or suggest at least this feature of claim 18.

Thus, the proposed combination fails to establish a *prima facie* case of obviousness regarding Applicants' dependent claim 22, which includes all the features of independent claim 18. Accordingly, Applicants respectfully request that the rejection of claim 22 under 35 U.S.C. § 103(a) be withdrawn.

# IV. Claim Rejections Under 35 USC § 103– Claims 15 and 20

# A. Statement of the Rejections

Claims 15 and 20 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over *Kirkman* in view of *Takubo* as applied to claim 11 and 18 and further in view of U.S. Patent 6,396,712 to Kujik, hereafter *Kuijk*.

#### B. Discussion of the Rejections

Applicants' independent claims 11 and 18, as amended, comprise a combination (of elements and features) that is not disclosed, taught, or suggested by the proposed combination.

#### 1. Claim 15

Applicants' independent claim 11, as amended, includes "the second region of electrical connection pads arranged to have a higher areal density than electrical

APPLICATION NO.: 10/669,982

ATTORNEY DOCKET NO.: 10021114-1

Page 11 of 12

connection pads in the first region of electrical connection pads." The proposed combination (namely, *Kirkman* in view of *Takubo* as applied to claim 11 in further view of *Kujik*) fails to disclose, teach or suggest at least this feature of claim 11.

Thus, the proposed combination fails to establish a *prima facie* case of obviousness regarding Applicants' dependent claim 15, which includes all the features of independent claim 11. Accordingly, Applicants respectfully request that the rejection of claim 15 under 35 U.S.C. § 103(a) be withdrawn.

#### 2. Claim 20

Applicants' independent claim 18, as amended, includes "said plurality of bond pads are disposed with an areal density less than said connection pads." The proposed combination (namely, *Kirkman* in view of *Takubo* as applied to claim 18 in further view of *Kujik*) fails to disclose, teach or suggest at least this feature of claim 18.

Thus, the proposed combination fails to establish a *prima facie* case of obviousness regarding Applicants' dependent claim 20, which includes all the features of independent claim 18. Accordingly, Applicants respectfully request that the rejection of claim 20 under 35 U.S.C. § 103(a) be withdrawn.

APPLICATION NO.: 10/669,982 ATTORNEY DOCKET NO.: 10021114-1

Page 12 of 12

# **CONCLUSION**

For at least the reasons set forth above, Applicants respectfully submit that pending claims 1-22 are allowable over the cited art of record and the present application is in condition for allowance. Accordingly, a Notice of Allowance is respectfully solicited. Should the Examiner have any comments regarding the Applicants' response, Applicants request that the Examiner telephone Applicants' undersigned attorney.

Respectfully submitted,

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